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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,425	03/07/2002	Shigenori Watari	NIT-335	9088

7590 05/08/2003
MATTINGLY, STANGER & MALUR, P.C.
SUITE 370
1800 DIAGONAL ROAD
ALEXANDRIA, VA 22314

EXAMINER

MEYER, DAVID C

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 05/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/091,425	WATARI ET AL.	
	Examiner	Art Unit	
	David C. Meyer	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 07 March 2002.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-7 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) 3, 4, 6 and 7 is/are allowed.

6) ☒ Claim(s) 1, 2 and 5 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6, 8</u> .	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____
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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al (US 5,828,449).

Regarding claim 1, King et al discloses an object inspection system, wherein detection objects 12 are arranged on a planar surface 18, which is in turn arranged on a support surface 27. Both planar surface 18 and support surface 27 could constitute a background panel. An image processor 38 controls a ring shaped light source 24, which illuminates objects 12, planar surface 18, and support surface 27. Light reflected therefrom is detected by CCD detector 30. King et al discloses that the objects and the

light source are moved with respect to each other during inspection. Thus a scanning operation takes place. Image processor 28 processes a reflected image and determines inspection information including size. (See Figs. 1 and 3 and column 4, line 40 to column 5, line 63.) King et al does not disclose that surface 18 or surface 27 has a mark.

It is well known when performing a size or a height measurement to arrange a detection object before a background that has some type of reference mark that serves as a standard for comparison. For example, when a crime suspect is arrested, a photograph or "mug shot" is taken in which the suspect stands in front of a background having incremental marks that allow a person viewing the photograph to determine the suspect's height. It would have been obvious to one of ordinary skill in the art at the time of invention to modify King et al by arranging objects 12 on a background having some mark as a standard in order to facilitate the determination of size.

Regarding claim 2, King et al discloses all of the recited elements except for a coded pattern on the detection object. It is well known to mark all manner of objects, from the very large to the very tiny, with a coded pattern such as a bar code in order to facilitate a classification procedure or inventory tracking. Because claim 2 does not specify the manner in which the coded pattern is used, simply arranging a coded pattern on a detection object is not deemed a non-obvious modification of prior art inspection apparatuses. It would have been obvious to one of ordinary skill in the art at the time of invention to modify King et al by arranging coded patterns on the detection objects 12 in order to facilitate a classification procedure or inventory tracking.

Regarding claim 5, although King et al does not disclose an auxiliary or a primary mark on surfaces 18 and 27, the obviousness rejection of claim 1 is applicable. The claim does not recite the auxiliary mark as having a function. As stated in the rejection of claim 1, it would have been obvious to one of ordinary skill in the art at the time of invention to modify King et al by arranging objects 12 on a background having some mark as a standard in order to facilitate the determination of size. Whether that mark consisted of one or more primary marks and auxiliary marks would have been obvious in view of the desired accuracy of the inspection system.

Allowable Subject Matter

4. Claims 3-4 and 6-7 are allowed. The following is an examiner's statement of reasons for allowance: The prior art includes inspection apparatuses that utilize a reflected light arrangement for determining the size and/or height of an object, wherein the object is arranged in front of a background of some type. (See King et al, White, and Jones et al.) These references do not disclose the placement of a coded pattern on a detection object. However, it is well known to mark all manner of objects with a coded pattern to facilitate a classification procedure or inventory tracking. This art provides no motivation for augmenting the inspection apparatus with an analytical unit

The prior art also includes "automatic analyzers" that include various optical means of determining a liquid level height. These references do not disclose determining the height of a sample container, nor do they disclose a background panel having a mark as a standard.

The prior art of record does not provide motivation for combining an inspection arrangement in which an object is positioned in front of a background panel and an automatic analyzer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. White (US 5,400,476) discloses an inspection apparatus utilizing a reflected light arrangement to perform inspection. Babunovic (US 3,629,595) discloses an inspection apparatus that does not measure size or height. Krause (US 5,463,228) discloses an apparatus for determining liquid level. Jones et al (US 5,764,785) discloses an object identification system that measures object size and height, but that lacks a background having a mark. Norikazu et al (JP 2000-105247) discloses an analyzer that includes structure for reading a coded pattern on a container and for determining the liquid level within the container, but that lacks a background having a mark. Toshiyuki (JP 2000-283824) discloses an apparatus that detects the liquid level within a container and that reads a coded pattern located on the container, but that lacks a background having a mark.


Art Unit: 2878

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Meyer whose telephone number is 703-305-7955. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on 703-308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0935.

DCM
May 2, 2003



DAVID PORTA
SUPERVISORY PATENT EXAMINER
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